IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application:

1. (Currently amended) A method for processing changes to purchase orders of items offered for sale in an object oriented order processing system, the method comprising the steps of:

receiving a change to an existing purchase order at said order processing system, said change a result of a request by a customer, said order represented by an order object including a reference to a collection of objects containing attribute information;

generating, by said order processing system, a change order based on the existing purchase order, the change order containing the change to the existing purchase order;

comparing, at said order processing system, the change order to the existing purchase order to generate a change order result referencing an order comparator object that indicates differences between the change order and the existing order, and determining if any other attributes related to the change order are changed based on the change order, and if the other attributes are changed, then supplementing the change order result to indicate the differences between those other attributes, wherein the step of comparing the change order to the existing order comprises the step of:

for each object in the existing order for which the change signal indicates a new value for an attribute of a corresponding object in the change order, generating a change order result that identifies:

i) the new value of the attribute of the corresponding object in the change order; and

ii) the existing value of the corresponding attribute of the object in the existing order, and wherein the step of comparing is done concurrently with the step of generating a change order, such that the step of generating a change

order result in the step of comparing is performed during the processing of each object in the existing order for which the change signal indicates a new value for an attribute of that object; and

providing, from said order processing system, the change order result to said customer such that the customer is capable of distinguishing the differences between the change order and the existing purchase order of items offered for sale.

2. (Original) The method of claim 1 wherein the step of generating a change order containing the change to the existing order comprises the steps of:

copying the existing order to the change order such that the change order contains any objects that exist within the existing order, each object having at least one attribute and an associated value; and

replacing values of any attributes of objects in the change order with new values for those attributes as indicated in the change to the existing order, such that the change order contains objects having attributes having any new values as indicated in the change to the existing order, while the existing order contains objects having attributes having values that are unchanged.

3. (Original) The method of claim 1 wherein the step of receiving a change to an existing order comprises the steps of:

receiving an identification of an existing order which is to be changed;

placing a hold on the existing order;

receiving a change signal indicating a new value for an attribute of an object; and

wherein the step of generating a change order based on the existing order comprises the step of:

for each object in the existing order for which the change signal indicates a new value for an attribute of that object, performing the steps of:

i) copying the object and any attributes and associated values in the existing order to an object in the change order having corresponding attributes and associated values; and

ii) assigning the new value as indicated in the change signal to a value of a corresponding attribute of the object in the change order.

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6. (Original) The method of claim 4 wherein the step of comparing the change order to the existing order is done after the step of generating a change order.

7. (Original) The method of claim 4 wherein:

there are multiple objects in the existing order which correspond to the object in the change order having an attribute for which the change signal indicates a new value; and

wherein the step of comparing generates a change order result that indicates each existing value of the corresponding attribute of each of the multiple objects in the existing order.

8. (Original) The method of claim 1 wherein the step of comparing the change order to the existing order comprises the step of:

for each object having an attribute in the change order that has a different value from an existing value of a corresponding attribute of a corresponding object in the existing order, generating a change order result that identifies:

i) the value of the attribute of the object in change order; and

ii) the existing value of the corresponding attribute of the corresponding object in the existing order.

9. (Original) The method of claim 8 wherein the step of generating a change order result generates a change order result in a format including at least one of text and a markup language.

10. (Original) The method of claim 9 wherein the step of generating a change order result selects the format of the change order result based on an identity of a recipient of the change order result and wherein the step of providing provides the change order result to a recipient in the format selected based on the identity of the recipient.

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15. (Currently amended) An order processing computer comprising:

     an interface;

     a processor;

     a memory encoded with an order application; and

     an interconnection mechanism coupling the interface, the processor and the memory;

     wherein the processor performs the order application as an order process to process changes to purchase orders in an object oriented order processing system, said object oriented order processing system having an order object including a reference to a collection of multiple objects containing attribute information, by performing the operations of:

receiving, via the interface, a change to an existing purchase order, the existing purchase order existing in an order database accessible to the order process, said change a result of a request by a customer;

generating, in the memory, a change order based on the existing purchase order, the change order containing the change to the existing purchase order and including a reference to an order comparator object;

comparing the change order to the existing purchase order to generate a change order result in the memory that indicates differences between the change order and the existing purchase order, and determining if any other attributes related to the change order are changed based on the change order, and if the other attributes are changed, then supplementing the change order result to indicate the differences between those other attributes<u>, wherein when the order process performs the operation of receiving a change to an existing order, the order process performs the operations of:</u>

<u>   receiving an identification of an existing order which is to be changed;</u>

<u>   placing a hold on the existing order;</u>

<u>   receiving a change signal via the interface indicating a new value for an attribute of an object; and</u>

<u>wherein when the order process performs the operation of generating a change order based on the existing order, the order process performs the operations of:</u>

<u>   for each object in the existing order in the memory for which the change signal indicates a new value for an attribute of that object, performing the steps of:</u>

<u>   i) copying the object and any attributes and associated values in the existing order to an object in the change order in the memory having corresponding attributes and associated values; and</u>

<u>   ii) assigning the new value as indicated in the change signal to a value of a corresponding attribute of the object in the change order, and wherein the order process performs the operation of comparing concurrently with the operation of</u>

generating a change order, such that the operation of generating a change order result in the operation of comparing is performed during the processing of each object in the existing order for which the change signal indicates a new value for an attribute of that object; and

providing the change order result to said customer via the interface, such that the customer is capable of distinguishing the differences between the change order and the existing order.

16. (Original) The order processing computer of claim 15 wherein when the order process performs the operation of generating a change order containing the change to the existing order, the order process performs the operations of:

copying the existing order to the change order in the memory such that the change order contains any objects that exist within the existing order, each object having at least one attribute and an associated value; and

replacing values of any attributes of objects in the change order in the memory with new values for those attributes as indicated in the change to the existing order, such that the change order contains objects having attributes having any new values as indicated in the change to the existing order, while the existing order contains objects having attributes having values that are unchanged.

17. (Original) The order processing computer of claim 15 wherein when the order process performs the operation of receiving a change to an existing order, the order process performs the operations of:

receiving an identification of an existing order which is to be changed;

placing a hold on the existing order;

receiving a change signal via the interface indicating a new value for an attribute of an object; and

wherein when the order process performs the operation of generating a change order based on the existing order, the order process performs the operations of:

for each object in the existing order in the memory for which the change signal indicates a new value for an attribute of that object, performing the steps of:

i) copying the object and any attributes and associated values in the existing order to an object in the change order in the memory having corresponding attributes and associated values; and

ii) assigning the new value as indicated in the change signal to a value of a corresponding attribute of the object in the change order.

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20. (Original) The order processing computer of claim 18 wherein the order process performs the operation of comparing the change order to the existing order after the step of generating a change order.

21. (Original) The order processing computer of claim 18 wherein:

there are multiple objects in the existing order in the memory which correspond to the object in the change order having an attribute for which the change signal indicates a new value; and

wherein when the order process performs the operation of comparing, the order process generates a change order result in the memory that indicates each existing value of the corresponding attribute of each of the multiple objects in the existing order.

22. (Original) The order processing computer of claim 15 wherein when the order process performs the operation of comparing the change order to the existing order, the order process performs the operations of:

for each object having an attribute in the change order that has a different value from an existing value of a corresponding attribute of a corresponding object in the existing order in the memory, generating a change order result in the memory that identifies:

i) the value of the attribute of the object in change order; and

ii) the existing value of the corresponding attribute of the corresponding object in the existing order.

23. (Original) The order processing computer of claim 15 wherein when the order process performs the operation of generating a change order result, the order process generates a change order result in a format including at least one of text and a markup language.

24. (Original) The order processing computer of claim 23 wherein when the order process performs the operation of generating a change order result, the order process selects a format of the change order result based on an identity of a recipient of the change order result.

25. (Original) The order processing computer of claim 24 wherein when the order process performs the operation of providing, the order process provides the change order result from the memory to a recipient via the interface according to a format based on the identity of the recipient.

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